Clarke®

air

AIR SHEAR

MODEL NO: CAT140

PART NO: 3120154

OPERATING & MAINTENANCE INSTRUCTIONS

CE

GC0414

INTRODUCTION

Thank you for purchasing this CLARKE Air Shear.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

IMPORTANT

Please read all of the safety and operating instructions carefully before using this product. The following safety symbols are to be found on the air tool.

	Read this instruction booklet carefully before use.		Wear ear protection
	Wear eye protection		

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

GENERAL SAFETY RULES

CAUTION: FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN PERSONAL INJURY, AND/OR DAMAGE TO PROPERTY.

WORK ENVIRONMENT

1. Keep the work area clean and tidy.
2. Dress appropriately - Do not wear loose clothing or jewellery. Tie long hair out of the way.
3. Keep children and visitors away - Do not let children handle the tool.
4. Do not operate the tool where there are flammable liquids or gases.

USE OF POWER TOOLS

1. Stay alert and use common sense - do not operate the tool when you are tired or under the influence of alcohol, drugs or medication.
2. Always wear eye protectors when using the shear. Eye protectors must provide protection from flying particles from the front and the side. Ear protectors should also be worn.
3. Do not overreach - Keep proper footing and balance at all times.
4. Never use oxygen, CO^2, combustible gases or any type of bottled gas as a source of power for this tool.
5. Do not connect the air supply hose with your finger on the trigger.
6. Do not exceed the maximum pressure for the tool of 90 psi / 6.2 bar.
7. Keep the air supply hose away from heat, oil and sharp edges.
8. Do not fit the tool to any stand or clamping device that may damage it.
9. Check hoses for leaks or worn condition before use, and ensure that all connections are secure.
10. Do not use the tool for any purpose than that described in this manual.
11. Do not carry out any alterations or modifications to the tool.
12. Always disconnect from the air supply when:
    - Performing any maintenance
    - The tool is not in use.
    - The tool will be left unattended.

- Moving to another work area.
- Passing the tool to another person.

13. Never use the tool if it is defective or operating abnormally.
14. This tool should be serviced at regular intervals by qualified service personnel.
15. Avoid damaging the tool for example by applying excessive force of any kind.
16. Always maintain the tool with care. Keep it clean for the best and safest performance.
17. Quick change couplings should not be located at the tool. They add weight and could fail due to vibration.
18. DO NOT force or misuse the tool. It will do a better and safer job at the rate for which it was designed.
19. Do not remove any labels. Damaged labels should be replaced.
20. This tool vibrates with use. Vibration may be harmful to your hands or arms. Stop using the tool if discomfort, a tingling feeling or pain occurs. Seek medical advice before resuming use.

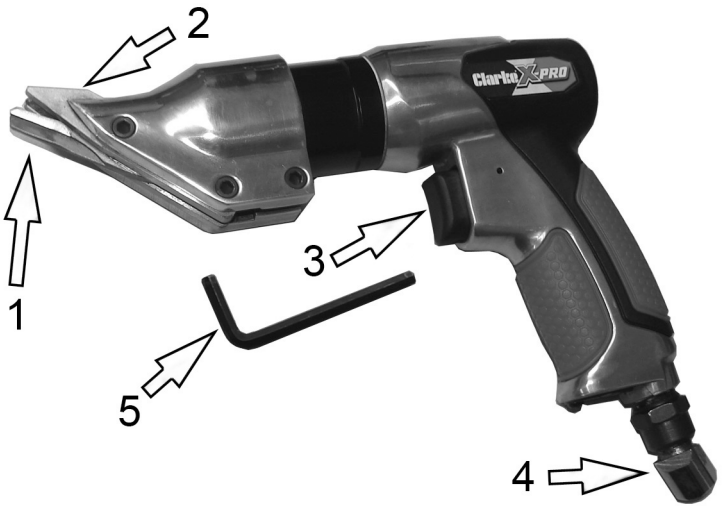
HAZARDS SPECIFIC TO SHEARS

1. Be careful around all moving parts and pinch points. Always keep your fingers away from the point of cutting.
2. Ensure material is properly supported during cutting. Use supports for long material. Hold the material securely to prevent it tilting during the cut. Use clamps or vices to hold the work piece whenever possible.
3. Take care of sharp edges produced by the cutting operation.
4. Do not use damaged blades. When replacing blades make sure they are correctly and securely mounted.
5. Anticipate the unexpected tool movement due to a binding blade. Release the trigger immediately if this occurs.

TRANSPORT & STORAGE

1. Never carry the tool by the air hose.
2. Never carry the tool with your finger on the trigger.
3. When not in use the tool must be disconnected from the air supply and stored in a dry place out of the reach of children (preferably in a locked cabinet).
4. Avoid storing the tool where the temperature is below 0^{O}C.

OVERVIEW

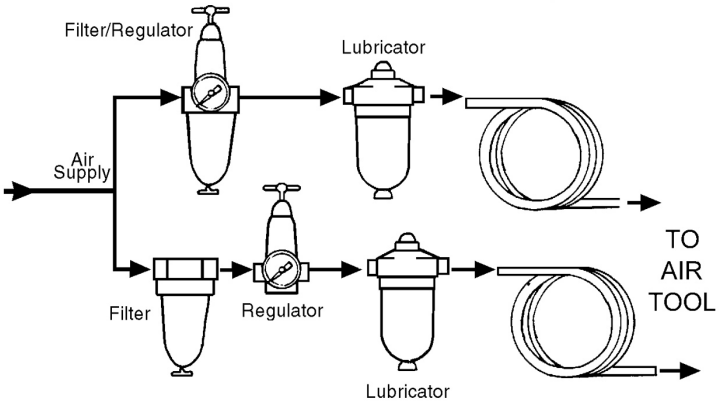


NO	DESCRIPTION	NO	DESCRIPTION
1	Moving Knife	4	Airline Connector
2	Side Blade	5	Hex Key
3	Trigger		

COMPRESSED AIR REQUIREMENTS

WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF COMPRESSORS AND COMPRESSED AIR SUPPLY.

- Use only clean, dry, regulated compressed air as a power source.
- Air compressors used with the tool must comply with the appropriate European Community Safety Directives.
- A build-up of moisture or oil in the air compressor will accelerate wear and corrosion in the tool. Ensure any moisture is drained from the compressor daily and the inlet filter is kept clean.
- If an unusually long air hose is required, (over 8 metres), the line pressure or the hose inside diameter may need to be increased.
- The air hose must be rated at least 150% of the maximum operating pressure of the tool.



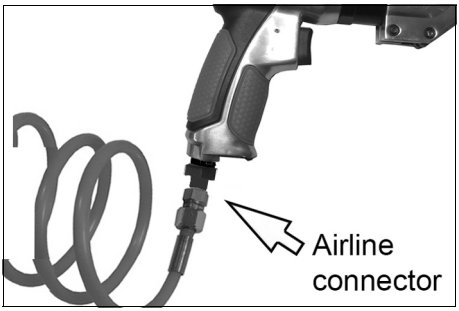
- A typical air line layout is shown above. If an automatic in-line filter/ regulator is used, it will keep the tool in good condition, but should be regularly checked and topped up with oil. clarke airline oil should be used, and the lubricator adjusted to approx 2 drops per minute.
- For optimum performance it is recommended that a 3/8" ID hose is used.
- Never exceed the maximum operating pressure for the tool. It is recommended that air pressure to this tool does not exceed 90 psi at the tool when running. Higher pressures and dirty air will shorten the life of the tool due to faster wear and is a possible safety hazard.

BEFORE USE

WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF AIR COMPRESSORS AND COMPRESSED AIR SUPPLIES.

NOTE: Ensure the compressor is turned off.

1. If required, connect an in-line mini oiler to the tool.
   - A mini oiler helps to prolong the life of the air tool. Remove the oil fill screw from the side of the mini oiler and fill with Air-line Oil available from your CLARKE dealer. Replace the screw before using the tool.



2. If a mini-oiler is not being used, run a few drops of oil through the tool before use. It can be entered through the inlet strainer or via the hose at the nearest connection to the air supply.
3. Connect a suitable hose as shown, using the airline connector supplied with the tool.
4. Connect the other end of the hose to the compressor.
5. Turn on the air supply and check for air leaks. Rectify any found before proceeding. PTFE tape may be useful for sealing threaded connections.

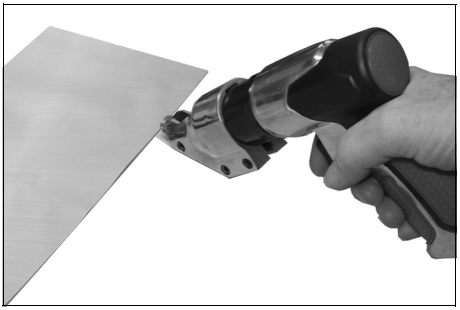
Your air tool is now ready for use.

You can fit a whip hose with a quick fit coupling if required (available from your Clarke dealer).

Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

OPERATION

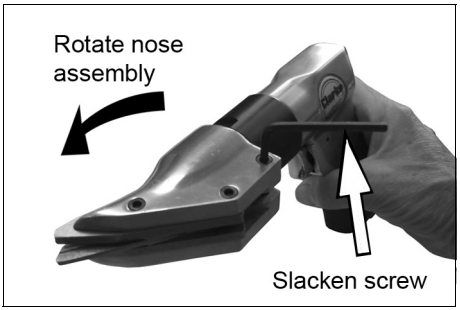
USING THE SHEAR



1. Place the shear against the side of the sheet metal you want to cut, see below.
2. Squeeze the trigger to start the metal shear.
3. Maintain constant pressure to move the tool through the sheet metal.
4. Release the trigger to stop the metal shear.
5. Always ensure the tool has stopped before putting it down.

WORKING AT AN ANGLE

The shears can be set to operate in line with the handle or at an angle, for example, if working in a confined space.



1. To do this, re-set the nose section in its new position by slackening the hex screw shown using the key, and rotating the nose assembly to the angle required.
   - It can be set at any angle required.
2. Ensure you have re-tightened the screw before using the shear.

DISCONNECTING THE AIR SUPPLY

1. Do not disconnect the air supply hose until the compressor has been shut down and the compressed air released.
2. Refer to the compressor instruction manual for the procedure to shut down and vent the compressed air.
3. Once the pressure has been released, disconnect the air supply hose from the air tool.
4. Store the tool safely in its box in a dry, secure environment.

MAINTENANCE

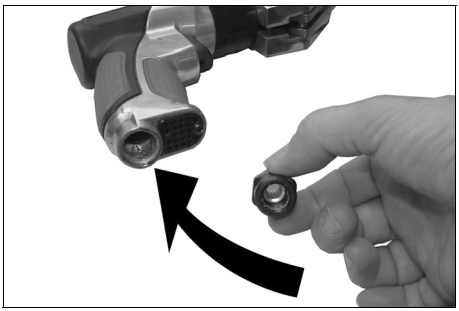
WARNING: MAKE SURE THAT THE AIR TOOL IS DISCONNECTED FROM THE AIR SUPPLY BEFORE STARTING ANY CLEANING, OR MAINTENANCE PROCEDURES.

DAILY

1. Before use, drain water from the airline filter and compressor.
2. Pour a few drops of Clarke air-line oil, into the tool air inlet. This should be carried out regardless of whether or not an in-line mini oiler is used. If an in-line mini oiler is not used, this procedure should be repeated after every two to three hours of use.

WEEKLY

1. Check the air inlet screen filter for blockage and clean if necessary.

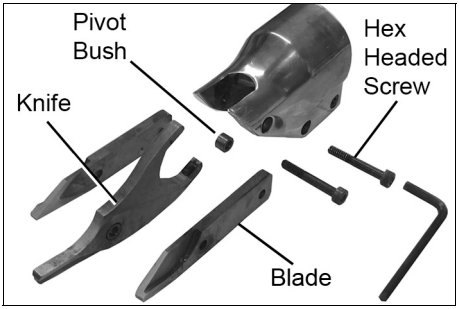


CLEANING

1. Keep the body of the tool clean and free from debris.
2. Grit or gum deposits in the tool may also reduce efficiency. This condition can be corrected by cleaning the air strainer and flushing out the tool with gum solvent or oil, or failing this, the tool should be disassembled, thoroughly cleaned, dried and reassembled. This is better left to your Clarke dealer.
3. After extensive use, remove the inlet screen filter and flush out the mechanism with gum solvent or oil or an equal mixture of Clarke air-line oil and paraffin. Allow to dry before use.
4. Clean the air inlet filter screen inside the hose adaptor.
5. If the tool runs erratically or becomes inefficient, and the air supply is of good quality, it may be necessary to dismantle the air motor and replace worn or damaged parts. You may prefer to take the tool to your Clarke dealer if internal maintenance is required.

REPLACING BLADES

After heavy use, the blades and knife may become damaged and require replacement. Replacements are available from your Clarke dealer.



1. To remove both blades and the knife, unfasten the three socket headed screws using the hex key provided.
    - The nose section will become detached from the body connector.
2. Remove and replace the knife and the left/right-hand blades and re-tighten the screws.
    - Take care not to lose the knife pivot bush shown and replace it when refitting the knife.

PERFORMANCE

Please note that factors other than the tool may effect its operation and efficiency such as reduced compressor output, excessive drain on the airline, moisture or restrictions in the air-line, or the use of connectors of improper size or poor condition which will reduce air supply.

**Clarke Air Line Oil (part no. 3050825) is available from your Clarke dealer.

When not in use, disconnect from air supply, clean & store in a safe, dry place.

Your Clarke air tool has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local Clarke dealer.

STORAGE

If the tool is to be stored, or is idle for longer than 24 hours, run a few drops of Clarke air line oil into the air inlet, and run the tool for 5 seconds in order to lubricate the internal parts.

ACCESSORIES

A wide range of accessories is available including filter/regulators, lubricators, high-pressure hoses (5 to 50 metres) etc.

Contact your Clarke dealer for further information or Clarke International Service Department on 01992 565333.

TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION
Tool runs at normal speed but slows down under any load.	1. Motor parts worn. 2. Worn or sticking mechanism due to lack of lubricant.	1. Return to Clarke dealer for repair. 2. Drip air tool lubricating oil into air inlet. Allow oil to soak moving parts before using.
Tool runs slowly. Air flows weakly from exhaust.	1. Motor parts jammed with gum/dirt. 2. Air-line regulator in closed position. 3. General airflow blocked by dirt.	1. Examine inlet air filter for blockage. Drip a few drops of air tool lubricating oil into air inlet. 2. Adjust in-line regulator to open position. 3. Operate tool in short bursts.
Tool will not run. Air flows freely from exhaust.	1. Motor vanes stuck due to buildup of foreign material.	1. Disconnect air supply and rotate tool assembly manually. 2. Try operating tool in short bursts. 3. Tap motor housing gently with a rubber mallet. 4. Drip a few drops of air tool lubricating oil into air inlet to soak moving parts.
Tool will not shut off.	1. Throttle O-rings damaged or ill-fitting in seat.	1. Return to Clarke dealer for repair.

Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

PARTS LIST

No	Description
1	Housing
2	Housing Cover
3	Screw
4	Rear Cover
5	Bolt
6	Soft Grip
7	Soft Grip
8	Exhaust Deflector
9	Screw
10	Air Inlet
11	O-Ring
12	O-Ring
13	O-Ring
14	Valve Stem
15	O-Ring
16	Trigger Sleeve
17	Spring
18	Trigger
19	Set Screw
20	Bearing
21	Rear Plate
22	Rotor
23	Rotor Blade (set 5)

No	Description
24	Cylinder
25	Bolt
26	Front Plate
27	Gasket
28	Bearing
29	Bearing
30	Gear
31	Bolt
32	Work Spindle
33	Ring Gear
34	Bearing
35	Clamp Nut
36	Spacer
37	Eccentric Nut
38	Bearing
39	Cutter Housing
40	Socket Headed Screw
41	Lock Nut
42	Left Blade
43	Knife
44	Pivot Bush
45	Right Blade
46	Hex key

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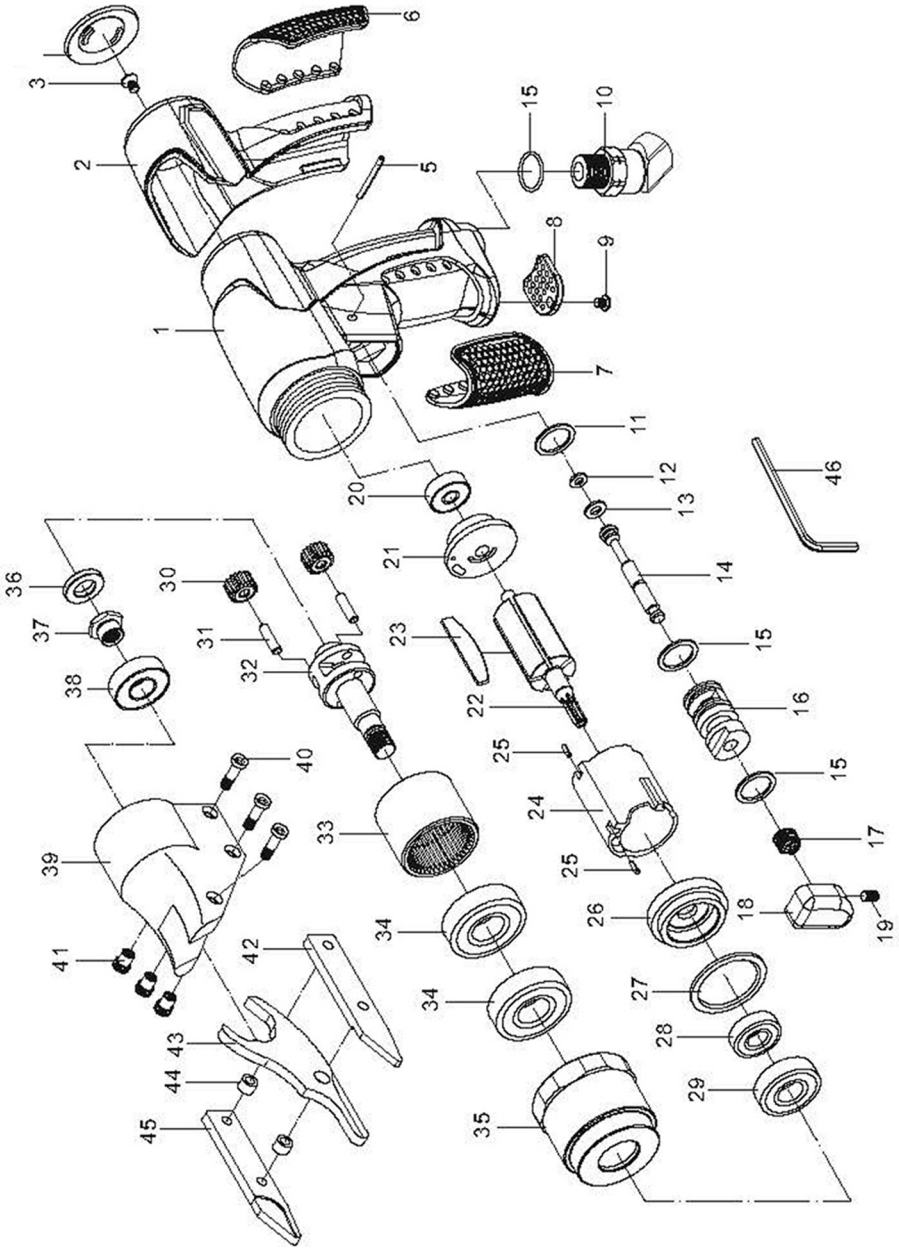
PARTS DIAGRAM



SPECIFICATION

Model Number	CAT140
Part Number	3120154
Min. Hose Size (ID)	3/8" BSP
Max Operating Pressure	90 psi (6.2 bar)
Air Consumption	18 cfm at full power (average = 5.5 cfm)
Stroke per min	3200 @ 90psi
Air Inlet Size	1/4" BSP
Sound Pressure Level (LpA dB)	79 dB(A)
Sound Power Level (LwA dB)	90 dB(A)
Vibration Levels	4.2 m/s^2 (uncertainty factor K= 1.5$m/s^{2)}$
Weight	1.5 kg
Cutting Capacity	1.2 mm (18 gauge) mild steel

Please note that the details and specifications contained herein are correct at the time of going to print. However Clarke International reserve the right to change specifications at any time without prior notice.

DECLARATION OF CONFORMITY

CE

Clarke® INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2006/42/EC *Machinery Directive.*

The following standards have been applied to the product(s):

EN ISO 11148-11:2011

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2013

Product Description:	Air Shear
Model number(s):	CAT140
Serial / batch Number:	N/A
Date of Issue:	07/01/2014

Signed:

J.A. Clarke
Director

CAT140 Air shear D O C

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A SELECTION FROM THE VAST RANGE OF

Clarke®

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From DIY to industrial, Plus air tools, spray guns and accesories.

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